SCHEDULE-B

Tender for the work of deviation and shifting of 230mm dia sewer pipeline in muniveeramma layout Chikkabanasawadi proposed for upcoming K-Ride project at above location coming under Banasawadi service station of AEE E-2-2 sub dvn.

Sl. No	Particulars	Unit	Qty	
1	Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 m3 in volume and stock piling at designated locations and disposal of dismantled materials and stacking serviceable and unserviceable materials separately.	m^3	**30.05**	
2	Earth work excavation for pipeline trenches in all kinds of soils by mechanical means as per drawing and technical specifications, including setting out, construction of shoring, strutting, barricading, caution lights, bracing, using sight rails & bonding rods at every 100 mm wherever necessary as directed, removal of stumps and other deleterious matter, dressing of sides and levelling the bottom of trench to the extent required , utilising the available excavated earth locally for the work etc., and all other appurtenances complete in the following strata. . All kinds of soils. Depth upto 1.50m	m^3	**120.18**	
3	Earth work excavation for pipeline trenches by mechanical means as per drawing and technical specification, including setting out, construction of shoring, strutting, cost of blasting materials, barricading, caution lights, bracing, using sight rails & bonding rods at every 100 mm wherever necessary as directed, removal of stumps and other deleterious matter, dressing of sides and levelling the bottom of trench to the extent required , utilising the available excavated earth locally for the work and all other appurtenances to complete in the following strata. Hard rock (blasting prohibited) Depth upto 1.50 m **Considering 20 percentage of EW qtyupto 1.5 mt depth**	m^3	24.036	
4	Providing S&S RCC SPUN / VIBRATED CAST PIPES (REINFORCED) pipes NP-3 Class conforming to IS:458-1988 with latest amentments using ordinary portland cement, for sanitary works and conveying to work site, rolling and lowering into trenches, laying true to line and level including loading and unloading at both destinations and jointing of pipes and specials, perfect linking of joints with jack to correct position including cost of jointing materials, i.e, rubber rings conforming to IS: 5382 for S&S RCC pipes, with all leads and lifts as directed and giving necessary hydraulic test as per ISS to the required pressure and commissioning etc. complete. (Contractor will make his own arrangements for procuring water for testing). Before the execution of the work, the contractor shall carry out the survey.300 mm dia,	m	**111.28**	
5	Refilling available earth around trenches/pipelines,cables in layers not exceeding 20 cm in depth,compacting each deposited layer by ramming after watering with a lead upto 50 m , and lift upto 1.5 m. Including cost of all labour complete as per specifications s	m^3	**112.32**	
6	Construction of RCC Machinehole chambers of 1:1.5:3 proportion or approved type Cast-insitu / Pre-cast RCC Machineholechambers,constructed using form vibrators of standard type, with barricading, danger lighting and using of sight rails and boning rods wherever necessary, shoring and strutting wherever required using OrdinaryPort Land Cement, using 1:1.5:3 proportion RCC with 20 mm and down graded jelly, well graded sand and steel of approved quality, 200 mm thick top concrete slab, having wall thickness and raft thickness as in approved drawings and with an offset in raft alround the chamber as in approved drawing, benching concrete with 1:6 slope			

	towards the central drain finished smooth,including fixing and grouting of pipes, including conveying to work spot supply and fixing SFRC Machinehole cover and frame (Heavy duty) conforming to IS:12592 with latest amendments, on a bed of CC 1:2:4 Providing and fixing of minimum 3 mm thick encapsulated plastic footsteps (as per IS 10910) on 12 mm dia. Grade Fe-500 steel bar (as per IS 1786) staggered at 300 mm apart as detailed in Technical specifications, including stone grit beding wherever required, watering, curing, engraving Machinehole number with flow direction on the inner cylindrical surface etc., complete including cost of reinforcement steel and fabrication charges and also cost and conveyance of all materials, labour with all lead and lifts. The Pre-cast RCC Machinehole are for various diamters and depths as stated below and as per detailed drawings, specifications and direction of the Engineer.For 1.2m diaMachinehole:			
	1.5 mt depth manhole NMH 1,2,3,4,5	No	5.00	
7	Providing and installing at site of work P.V.C. pipes including cost of pipes and specials and labour, including lowering into trenches, laying true to line, level and perfect linking at joints leak proof including jointing of approved type with all labour charges and all lift charges, handling charges including encasing the pipe around to a depth not less than 15 cms with gravel or selected earth available from the excavation etc. complete. 110mm(weight of pipe -1.315 kg)	m	50.00	
8	Supply and delivery at site special moulded variety PVC bend as per IS 7834/ 1987 and fabricated as per IG124/ 1984 with ISI mark with its latest amendments.110 mm dia PVC BEND	Each	50.00	
9	Supply and delivery at site special moulded variety PVC reducer as per IS 7834/ 1987 and fabricated as per IG124/ 1984 with ISI mark with its latest amendments110 mm dia PVC REDUCER	Each	50.00	
10	Removal of Unserviceable Soil with Disposal upto a suitable distance as directed by the Engineer incharge of work	m^3	7.86	
11	Dewatering the sewage / storm water by using reqired HP submersible pump for the diversion of storm / sewage during the execution of work.Considering for one Pump. 5 hp pump	Hr	**5.00**	
12	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared compacting with vibratory roller to achieve the desired density.	m^3	**14.37**	
13	Providing and laying in position Cement Concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machinery, curing, and all the other appurtenances required to complete the work as per technical specifications.Mix 1:3:6 Using 40 mm nominal size graded crushed coarse aggregates	m^3	**14.37**	

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